Ground currents interferred with the working of the telegraph line at Sandy Hook on the 4th, 11th and 16th.

Auroras.—The auroral display during the month has in some localities been unusually brilliant. The region of greatest frequency being near the 45th parallel of latitude.

## OPTICAL PHENOMENA.

The Solar Halos observed at more than one station on any particular date, were those reported from New York, Indiana and Maine, on the 1st; New York, Ohio. Illinois and Mississippi, on the 17th; Illinois, Iowa and Vermont, on the 21st; Tennessee and Maine on the 31st. Lunar Halos were observed in Georgia and Mississippi on the 8th; Indiana, New York and Michigan, on the 19th; Tennessee, Georgia and Iowa, on the 22d; Tennessee and Mississippi on the 25th; Rhode Island and Vermont on the 27th, and Vermont and Delaware on the 30th.

Fog Bow.—This phenomena was observed at Oxford, Maine, on the 25th. Mirage occurred at New London on the 18th.

## MISCELLANEOUS.

Polar bands were observed at Key West on the 4th, and at Toledo on the 1st.

Brilliant meteors have appeared in large numbers during the month, the most noted being those observed in Indiana, Missouri and New York, on the 3d; Kentucky, Missouriand Tennessee, on the 7th; Nova Scotia (near Halifax) on the 9th; Pennsylvania and New York on the 19th.

Earthquakes.—Light but perceptible shocks were experienced at Cairo, Illinois, July 9th, at 4 p. m., and at Camp Russell, Nebraska, July 23d.

## VERIFICATION OF PROBABILITIES.

Probabilities.—The critical comparison between the separate items of the published trl-daily probabilities and the subsequent weather reports, shows that on the average, during the month, 85.7 per cent. of the predictions have been well verified.

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Brig. Gen. (Bvt. Assg.) Chief Signal Officer, U. S. A.

albert J. Myer

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